VERMONT
DEPARTMENT OF HEALTH

Health Surveillance

Data Encyclopedia

A review of data sources and resources available at the Vermont Department of Health

1/15/2016

The Division of Health Surveillance, Public Health Statistics, has recently compiled the "Data Encyclopedia: A Review of Data Sources and Resources Available at The Vermont Department of Health." This publication provides an overview of the commonly used data sources to assess and track population health outcomes and contributors to disease in Vermont. It is intended to provide a high level description of the type of information in each data source, the potential uses and limitations of the data, and the existing reports summarizing the data. For additional information on accessing data from these sources, generating reports and interpreting the significance, please contact Mallory Staskus (Mallory.Staskus@vermont.gov) at the Vermont Department of Health.

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Data Sources vs. Data Resources

Data Sources

The data sources included in this document include surveys, registries, claims and discharge, and licensing data. Most of these data sources are cleaned and available for secondary data analysis by analysts granted access to the data. For the data sources that have been "cleaned", the variables have been formatted, appropriately categorized, and weighted as necessary. However, some data sources contain data that is more "raw" in character and prior to being used steps should be taken to clean and standardize the data for analysis. The four types of data sources presented here are:

- **Surveys** - Surveys contain self-reported responses to questions. Some, but not all, of the surveys included here are from a sample that is then weighted back to reflect the Vermont population. Surveys are usually completed at one point in time (annually, bi-annually, etc.).
- **Registries and Surveillance Systems** - This type of information is collected frequently and continuously. They are meant to show a real time snapshot of the population. In some cases, information is constantly open to change, so it is important to pay attention to time when information is accessed.
- **Claims and Discharge data** - Both of these data sources are based on billing information for visits to a health care provider. Claims data is information based on what an insurer paid for a given service. Discharge data tells us information about a visit to a health care provider based on diagnosis and procedure codes listed at discharge. It is important to note that both of these data sources rely on billing information and in some cases may not entirely describe what occurs during a visit to a health care provider.
- **Regulatory and Licensing data** – These data sources are continuously used to collect license and compliance information. Licensing data captures authorization for establishments or individuals that provide a service that may affect public health. Regulatory data tracks individual and establishment compliance and their capability to meet pre-determined standards that are in place to protect public health.

Data Resources

Individuals can access information about population health status and contributors to health through two primary resources developed by the Vermont Department of Health. These portals include access to various data sources that, in combination, can help to better understand health trends, opportunities for health improvement and current actions for health protection.

Healthy Vermonters Toolkit is built on the concepts of *Results Based Accountability*™ and includes:

Population Indicators (such as smoking prevalence) are measures for which the Health Department, with state government and community partners, shares responsibility for making change. All Healthy Vermonters 2020 indicators are displayed. The Health Department routinely uses three ways to assess population indicators at the local level: by county, by Health Department district office area, and by hospital service area (HSA). Maps & Trends links you to interactive InstantAtlas™ pages, with maps, tables and graphs for all Healthy Vermonters 2020 indicators and goals.

Performance Measures (such as the percentage of smokers registered with the Vermont Quit Network), are measures for which Health Department programs are responsible for the performance of interventions that, over time, will improve health, as reflected in the population indicators (such as reduced smoking prevalence).

Vermont Environmental Public Health Tracking

Tracking brings together environmental and public health data to assist in researching possible health threats from environmental exposures such as air pollution and drinking water contaminants. Local, state, regional, and national data will be available through the Vermont Tracking Network. Funded by the Centers for Disease Control and Prevention as part of the National Environmental Public Health Tracking Program, Vermont's Tracking program also links to comparable information from other states and to national data.

Data Sources:

Surveys

Data Source	***Adult Tobacco Survey (ATS)***
Sponsors	http://healthvermont.gov/prevent/tobacco/surveillance.aspx#ats The Health Department oversees data collection and analysis.
Contacts	Health Department's Tobacco Analyst Erin Singer Erin.Singer@vermont.gov 802-865-7783
Most current Year available	2014 is the most recent data set available.
Public use data set available	Request data through Erin Singer.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Conducted annually from 2000 through 2008. As of 2008 it is conducted in even calendar years. (2008, 2010, 2012, 2014)	The Vermont Adult Tobacco Survey (ATS) is a telephone survey conducted over an eight week period during the fall of the calendar year. The sample includes 2,000 respondents each year: 1,000 each of smokers and non-smokers regardless of telephone type. Beginning in 2008, the survey has been conducted biannually in even years and includes cell phone users. The survey takes approximately 20 minutes to complete.	Non-institutionalized Vermont adult (18 years and older) residents. Historically, the ATS includes over-sampling of both smokers and 18-24 year olds. In accordance with the study design, the results were weighted by gender, age, smoking status, household composition, telephone type, and county in order to compensate for differences between the sample and the overall Vermont adult population.	Ideal for evaluating the effectiveness of Vermont Tobacco Control Program efforts to reduce smoking and increase awareness and knowledge of smoking-related issues.	Several states conduct Adult Tobacco Surveys, but each is unique as this evaluation tool is not part of a national survey and data should not be directly compared to that from other states.	2010 and 2008 Adult Tobacco Survey reports (In depth report of the survey results)

Indicators for analysis	Broad topic areas: • Information on quit attempts and smoker confidence • Cessation methods • General awareness of cessation programs • Secondhand smoke perceptions and exposures • Attitudes about smoking • Provider interventions (some media campaign information available through 2010) • As of 2012, policy questions included on the survey Trend analysis cannot be done for most of these factors.

Data Source	**_Asthma Call Back Survey (ACBS)_**
Sponsors	http://healthvermont.gov/research/brfss/brfss.aspx The Health Department oversees data collection and cleaning.
Contacts	Maria Roemhildt, Ph.D. 802-951-4067 maria.roemhildt@vermont.gov
Most current Year available	Data available 1990 to 2013 for adults and 2010 for children. (2011 and 2013 child data has been collected, but is not yet available because data is not weighted). 　*In 2009, started including both cellphone and landline phone surveys for adults. 　*In 2011, the method for weighting sample data changed—cannot aggregate data from multiple years between the pre 2011 and post 2011 data periods. 　*The child ACBS is only collected in odd years starting with 2011.
Public use data set available	http://www.cdc.gov/asthma/acbs.htm Available geographies: State, County, Health District, Hospital Service Area

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Survey is conducted on an annual basis as a follow-up to individuals reporting asthma on the BRFSS. It is conducted for both adults and children (data on children is only collected in odd years starting with 2011).	• If respondent, who has asthma, agrees to a follow-up call at the end of the BRFSS they will be called and asked to participate in the ACBS 　o Parents that report a child in the household has asthma who agree to follow-up call will be asked to participate in the child ACBS. Child ACBS asks "most knowledgeable" to respond to questions regarding child's asthma, in some cases this is the child, but usually it is a parent or guardian.	VT Residents with Asthma	Collects more details about residents with asthma including: Medication use, risk factors, triggers, and preventative methods	We survey a sample of VT residents with asthma who completed BRFSS and agreed to follow-up calls then weight the data to estimate statewide values. Self-reported data, however collected over the long term it appears we are seeing that people are self-reporting information consistently.	• Asthma data pages (published annually) • Asthma Burden report (data from 2008-2010)

Indicators for analysis	• Asthma control and severity • Preventive Measures for environmental triggers • Medication use for control • Service utilization • Data can be linked back to all variables examined in the BRFSS

Data Source	**_Basic Screening Survey (BSS)_**
Sponsors	The Vermont Department of Health's Office of Oral Health. The BSS was developed by the Association of State and Territorial Dental Directors with technical assistance from CDC.
Contacts	Denise Kall Oral Health Epidemiologist Denise.Kall@vermont.gov 802-863-7248
Most current Year available	2013-2014 is the most recent data set available.
Public use data set available	No

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
The survey is conducted approximately every three-five years.	The survey is conducted in a sample of elementary schools. The sample includes about 750-1750 children. Gross dental or oral lesions are recorded by dental hygienists in accordance with state law. The examiner records presence of untreated cavities and urgency of need for treatment. In addition, caries experience (treated and untreated decay) is recorded. Children are also examined for presence of sealants on permanent molars. An optional questionnaire was also completed by some parents.	In the 2013-2014 screening, Kindergarten and third graders were included in the BSS. In previous years, children in grades 1, 2 and 3 were included in the BSS. Sample weights were used to produce population estimates based on selection probabilities and indicating the number of children in the sampling interval each screened child represented.	Most of the data are based on a dental screening. Ideal for understanding the oral health status and dental treatment needs of elementary school children in Vermont. Allows for analysis of trends over time.	Low and unrepresentative response rate on the questionnaire. Since dental screenings were conducted, not complete diagnostic dental examinations (no x-rays or more advanced diagnostic tools), these numbers may underestimate the proportion of children needing dental care. Grades included in the survey vary slightly over time.	• Keep Smiling Vermont: The Oral Health of Vermont's Children • Burden of Oral Disease in Vermont • Vermont State Dental Society's Action Plan for Dental Health • Vermont State Oral Health Plan

Indicators for analysis	Broad topic areas: • Demographic characteristics (grade, age, gender, race/ethnicity, participates in free or reduced lunch program) • Decay experience (treated and/or untreated decay), untreated tooth decay, need for dental care • Dental sealants on permanent molar teeth

Data Source	**_Behavioral Risk Factor Surveillance System (BRFSS)_**
Sponsors	http://healthvermont.gov/research/brfss/brfss.aspx The Health Department oversees data collection and cleaning
Contacts	Jessie Hammond, M.P.H., Program Coordinator 802-863-7663 jessie.hammond@vermont.gov

Most current
Year available
	Data available 1990 to 2014.
	     *In 2009, started including both cellphone and landline phone surveys for adults; cannot report combined measures that use both landline and cell phones sources until 2011 (had to be landline only).
	     *In 2011, the method for weighting sample data changed—we cannot aggregate data from multiple years between the pre 2011 and post 2011 data periods.

Public use data set available	http://www.cdc.gov/brfss/brfssprevalence/index.html Available geographies: State, County, Health District, Hospital Service Area

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Survey is conducted on an annual basis.	• Random digit dial telephone survey • Surveys are completed for a representative sample of the population • Information is then weighted with a raking procedure starting with 2011 data (a post stratification method of weighting was used pre-2011)	Vermont residents over 18	This is ideal for looking at risk factors and prevalence of chronic conditions at a population level in Vermont. This is a well-established survey that allows us to look at trends over time. Data can be compared across states.	It is not a census; we take a representative sample of surveys and weight them to represent the entire population of Vermont. Information is self-reported.	• Chronic Disease data pages (published annually) • BRFSS annual report • Burden Documents (Injury, asthma)

Indicators for analysis	• Chronic Conditions • Preventive Measures • Health Insurance/Access • Risk Behaviors (smoking/drinking/diet/exercise)

Data Source	*College Health Survey*
Sponsors	Data collection and management is overseen by the Health Department Data should be requested through the Health Department's College Health Survey Analyst
Contacts	Kristen Murray, Ph.D. 802-863-7276 kristen.murray@vermont.gov
Most current Year available	2014
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Conducted in even calendar years beginning in 2014.	Online survey completed during the spring semester. In 2014 VDH contracted with the ACHA to administer the National College Health Assessment (NCHA). This is a comprehensive survey including approximately 280 items. Beginning in 2016, revisions anticipated, however, the general design (comprehensive survey conducted online) will remain the same.	College-age students enrolled in a Vermont Institute of Higher Learning (public or private).	Tool for assessing a higher risk, hard to reach population. Schools were provided with individual reports. School and state data can be compared to National data.	Not all Colleges or Universities elected to participate. VDH has access only to the statewide data; school level information only provided to schools (2014).	Schools receive individual reports to use internally for programming and assessment.

Indicators for analysis	The College Health Survey measures demographic factors as well as the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among young adults. Including information on: • General health • Chronic disease • Disease and injury prevention • Mental health • Sexual health • Violence and personal safety including domestic and intimate partner violence • Alcohol, tobacco, and other substance use • Sleep, nutrition, and physical activity • Life events and behaviors influence on academic performance • Having received or wanting to receive more information on various health-related topics

Data Source	**Consumer Assessment of Healthcare Providers and Systems (CAHPS)**
Sponsors	Blueprint for Health and the Green Mountain Care Board. DataStat is contracted to collect, clean, and store the data.
Contacts	Mary Kate Mohlman Health Services Researcher Department of Vermont Health Access (DVHA) 802-654-3971 Marykate.Mohlman@vermont.gov
Most current Year available	Data available 2012 - 2014.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
The survey is conducted annually beginning in 2012.	Randomly selected patients (adults and children) receive a mailed survey from the Blueprint primary care practices in Vermont over a three month period. Patients are sent a letter and a copy of the survey twice and asked to return the survey mail. The only follow-up for completing the survey is the second mailing of the survey.	Patients in a primary care setting. Randomly selected patients that returned the paper survey. Patients could be either adult or youth patients at a participating clinic. A parent or guardian completed the survey if the randomly selected patient was under the age of 18.	Information on provider messaging and satisfaction with care among patients in a primary care setting.	Sampling Bias. Unweighted data.	Relationship between Medical Home Recognition and Patient Experience Responses for the CAHPS® PCMH Survey.

Indicators for analysis	- Access to care - Communication between practice/provider and patient - Self-management support - Office staff - Shared decision making among adult respondents - Comprehensiveness (adults-questions about emotional and mental wellbeing, children-questions about injury prevention, growth, emotional stability, diet)

Data Source	**_Health Care Provider Census_**					
Sponsors	http://healthvermont.gov/research/HlthCarePrvSrvys/HealthCareProviderSurveys.aspx					
Contacts	Moshe Braner 802-865-7703 or 800-869-2871 Moshe.braner@vermont.gov					
Most current Year available	Physicians (MD and DO)—1979, 1996-2014 (even years only) Dentists—1999-2013 (odd years only) Physician Assistants—1998-2012 (even years only) Adv. Practice Nurse Practitioners (APRNS)—1998-2002 (even years only) _Beginning in 2015, the professions list has expanded to include all licensed healthcare professions. Contact Moshe Braner for the full list of professions._					
Public use data set available	Public use data sets can be requested through Moshe Braner.					

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
The Vermont Department of Health has been collecting information on health care providers since 1994. Physicians (MDs and DOs), Dentists and Physician Assistants are surveyed every two years at the time of their relicensing. Surveys of APRN's were conducted by the Health Department in 1998, 2000, and 2002. More recent surveys of APRNs have been conducted by UVM.	Forms were included with the relicensing with the exception of the 2012 MD forms. That census is being conducted separate from the relicensing.	Beginning in 2015, the professions list has expanded to include all licensed healthcare professions. Licensed health care providers (including Physicians (MD and DO), dentists, PAs, and APRNs) who are actively serving Vermont patients. The APRN survey was last conducted by the Health Department in 2002. Residents and fellows are not included in the population of this survey. Individuals that provide remote services (mostly radiologists and pathologists) for Vermonters, from another state are included in the count of providers. However, their work time devoted to VT residents cannot be determined.	Most physicians/providers complete, because the forms are included with their relicensing, and the Health Department follows up with non-respondents. For most of the provider surveys, some trend comparisons can be made from survey to survey.	Self-reported by providers, and not further verified.	Summary and statistical reports are produced for every survey.

Indicators for analysis	Most statistics can also be shown by sub geographies (groups of townships) • Numbers and FTEs by specialty by geographical areas • Physician demographics • Years in practice • Training location (i.e. where did they go to medical school?) • Turnover and future retirement plans

Data Source	**_Pregnancy Risk Assessment Monitoring System (PRAMS)_**
Sponsors	http://healthvermont.gov/research/PRAMS/prams.aspx Information should be requested through PRAMS Coordinator at the Health Department. Survey data is collected annually by the Health Department.
Contacts	PRAMS Coordinator John Davy 802-863-7661 john.davy@vermont.gov
Most current Year available	Data available 2001-2012.
Public use data set available	May be requested through the CDC http://www.cdc.gov/prams/researchers.htm Available geographies: State

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data is collected on an ongoing basis and analytic files are updated annually.	This is a paper survey with phone follow-up that is mailed to a random sample of Vermont mothers 2-6 months after having a live birth in VT or NH. Drawn from birth certificate data, the sampling fraction is approximately 1 out of 5. Women with low birth weight infants (<2500g) are over-sampled. Data is weighted to be representative of the population.	Vermont resident mothers who have recently had a live birth.	A linkage to the birth certificate means PRAMS builds upon existing information. PRAMS covers topics not available elsewhere: prenatal care content & barriers to quitting smoking, drinking amount, breast-feeding duration, intention of pregnancy and sensitive questions on drug use and domestic violence.	Only includes pregnancies resulting in a live birth. Self-reported data can tend to under report certain health outcomes. A certificate of confidentiality may improve the reporting of questions in sensitive areas. Smallest level of geography: state of Vermont.	Examples of reports produced by PRAMS may be found at the PRAMS web site: Healthvermont.gov/ research/PRAMS/ Prams.aspx

Indicators for analysis	- Preconception health and family planning - Prenatal care - Alcohol, tobacco and drug use - Stress and abuse - Breastfeeding - Sleep environment - Dental Health - Postpartum care

Data Source	***Vermont School Nurses' Report***
Sponsors	The Maternal and Child Health Division coordinates data collection and storage. School Liaisons in the Health Department District Offices act as local level support for questions related to the survey content and monitor for completion.
Contacts	Nate Waite Nathaniel.Waite@vermont.gov 802-865-1399
Most current Year available	Data is currently available for the 2007-08 school year through 2014-15 school year.
Public use data set available	Aggregate data may be requested through District Office School liaisons. Available geographies: State, Health District, and Supervisory Union.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Information is collected annually by school nurses in public schools throughout Vermont.	Self-report survey. Information is reported by parents/guardians to the school nurse. The data is collected using web-based survey software then it is compiled and aggregated by the survey vendor. A final report is submitted to the Division of Maternal and Child Health (MCH) at the Health Department and shared with the Health Department school liaison.	Children in school whose parents provide information to the school nurse.	Information on access to health care and insurance coverage for all school age children (K-12). There is also information on a students' asthma status and the presence of an asthma action plan at school using standardized Final report includes filterable data by Health Department District Office, Supervisory Union/School District, school, and grade.	This is a convenience sample; methods and collection materials vary at each school site.	• Asthma Burden Report • Healthy Vermonter Goals related to school age health and oral health

Indicators for analysis	• Well child visits • Dental visits • Insurance status • Presence of an asthma action plan • School electronic Health Record capability

Data Source	*Young Adult Survey (YAS)*
Sponsors	Funded by federal discretionary grants to VDH from the Center for Substance Abuse Prevention (CSAP); specifically the SPF-SIG grant for the 2008 and 2010 administrations of the survey, and the PFS grant for the 2014 and (planned) 2016 administrations. The surveys are conducted by PIRE, the evaluation contractor for the Vermont SPF SIG and PFS grants.
Contacts	Lori Uerz (VDH): lori.uerz@vermont.gov; 802-652-4149 Bob Flewelling (PIRE): flewelling@pire.org Amy Livingston (PIRE): amy.livingston@partner.vermont.gov
Most current year available	2008, 2010, 2014
Public use data set available	No – only aggregate-level summary data are available to the public.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Depends on the availability and requirements of the parent grants. The surveys have been conducted in 2008, 2010, and 2014. A fourth administration is planned for 2016.	The YAS is an online survey hosted by PIRE for which young adult Vermont residents are recruited primarily through Facebook advertising. Drawings for cash awards are used as incentives. The age range for the 2008 and 2010 surveys was 18 to 29, and was 18 to 25 for the 2014 survey.	All Vermont residents in the target age range are eligible to participate.	The survey provides uniformly collected data from young adults on substance use behaviors and perceptions across Vermont. Sample sizes allow for disaggregation to the county level (for most counties). The data are weighted by age group, gender, and county to increase representativeness of the sample. Statewide prevalence estimates for key behaviors are generally similar to Vermont estimates provided by the National Survey on Drug Use and Health (NSDUH). The recruitment methods and use of online data collection make this a very cost efficient strategy for collecting data from a traditionally hard to reach population.	Although the survey is open to all young adult residents of the state, the sample is self-selected, consisting of persons who are aware of the survey and choose to participate. Therefore it is not necessarily a representative sample.	• Vermont Young Adult Survey 2014: Statewide Summary (accessible through the VDH/ADAP website). • Detailed statewide tables by age, gender, and student status (available through links in the Statewide Summary report). • County-specific tables with comparisons to the rest of the state (provided to PFS grantees only).

Indicators for analysis	• Selected substance use behaviors (alcohol use, binge drinking, marijuana use, prescription drug misuse) • Perceived risk of harm from use of alcohol and other drugs • Underage access to alcohol • Open-ended comments regarding alcohol and other drugs

Data Source	*Youth Risk Behavior Survey (YRBS)*
Sponsors	http://healthvermont.gov/research/yrbs.aspx Data collection and management is overseen by the Health Department.
Contacts	Kristen Murray, Ph.D. 802-863-7276 kristen.murray@vermont.gov
Most current Year available	The most current data set available is from 2013. The survey is completed by students every other year (survey occurs during odd years since 1993).
Public use data set available	http://www.cdc.gov/healthyyouth/data/yrbs/data.htm Available geographies: State, County, Health District, and Hospital Service Area.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
The survey is conducted in odd years at all public middle and high schools around the state.	Paper Survey (approximately 100 questions for HS and 70 questions for MS) administered during the school day.	Middle and high school age students in Vermont schools.	It occurs in all public high and middle schools around the state. Weighted data is available at both a statewide and sub state level. Data can be used for national comparisons.	It does not reach children who do not attend school or who were out the day the survey was administered.	• YRBS Statewide Summary Report • YRBS Local Summary Reports (by county and by school district) • YRBS data briefs (approximately 6 published each year)

Indicators for analysis	The YRBS measures demographic factors as well as the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among youth. Including information on: • Risk Behaviors (personal safety, substance abuse, seatbelt use, etc) • Diet • Exercise • Mental health questions related to bullying, sexuality, violent behavior • Youth assets • Perception of risk • Sexual Behaviors

Registries and Surveillance Systems:

Data Source	**BioSense 2.0**
Sponsors	Data is analyzed by VDH infectious disease epidemiologists. ASTHO provides the technical platform.
Contacts	Bradley Tompkins Health Surveillance Epidemiologist 802-863-7240 Bradley.Tompkins@vermont.gov
Most current year available	2015
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
The system is updated daily and sometimes hourly.	Designed to capture and analyze Emergency Department data for trends or unusual activity that may signal the occurrence of public health events.	All individual Emergency Department visits from participating hospitals and urgent care clinics in Vermont.	Provides timely data on disease activity at Vermont hospitals. Can detect unusual health events before traditional diagnostic methods. Cloud-based program that can be accessed from anywhere.	At this time Vermont hospitals are still coming onboard with the program, so it is not fully populated with VT data. BioSense 2.0 has various problems that have precipitated the abandonment of the platform by the syndromic community in favor of another surveillance system.	None.

Indicators for analysis	• Number of ED visits for a given chief complaint or diagnosis • Patient age, gender, location, race, ethnicity

Data Source	*Covisint Docsite*
Sponsors	Data should be requested from the Blueprint program at the Vermont Department of Health Access.
Contacts	Tim Tremblay Timothy.tremblay@vermont.gov 802-654-8923
Most current Year available	Data collection began at varying times for different sites. More information about this data source will be determined as data is shared with programs at the health department. The most current year of data available is calendar year 2014. Additional data is also available through August 31, 2015.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
This data is collected as a registry. Some information is transmitted in real time to the registry platform; other data is manually entered on a daily basis.	DocSite is a clinical registry. Clinical data from various primary care practice electronic health records (EHRs) is compiled into one database. Data is also manually entered by Blueprint program users. Data includes: clinical encounter information, labs, visits with the community health team, tobacco cessation program, and SASH, and participation in self-management workshops.	Individuals receiving care from participating providers and/or engaged with various community resources (Blueprint's self-management workshops, working with Blueprint's community health teams, SASH, and tobacco cessation counselors).	When fully populated, eliminates the need for time consuming clinical chart reviews from each practice's EHRs. The Blueprint uses a full extract for analytic purposes, linking it to the claims data in VHCUREs via its analytics vendor, Onpoint Health Data, and publishing results in practice- and HSA-level profiles. Full access to the extract itself is not currently available to other entities.	Currently offline. Blueprint working on restoring registry access. Contracts not yet executed.	• Vermont Health Service Area (HSA) Profile Reports • Blueprint for Health Annual Reports

Indicators for analysis	Clinical indicators of health for patients such as: • HBA1C • Blood pressure • BMI

Data Source	**_Early Aberration Reporting System (EARS)_**
Sponsors	Data is maintained and tracked by an epidemiologist in the Infectious Disease Section.
Contacts	Bradley Tompkins 802-863-7240 Bradley.Tompkins@vermont.gov Chelsea Dubie 802-863-7240 Chelsea.Dubie@vermont.gov
Most current year available	2003-2015
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Data is updated daily, 7 days a week	Designed to capture and analyze recent Emergency Department visit data for trends and signals of abnormal activity that may indicate the occurrence of events significant to public health (eg. outbreaks, unusual illnesses)	All Individual Emergency Department visits from participating Vermont hospitals (UVMMC, CVH, Copley, BMH, NCH, SVMC)	Provides very fast data (within 24 hours) on Emergency Department visit activity at half of Vermont hospitals. Covers roughly 75-80% of ED beds in state. No missing data, there is 100% reporting from all participating hospitals. For some hospitals, data goes back to 2003.	EARS system is old and unsupported by its original sponsor, CDC. Is not capable of handling new generation syndromic messaging formats (HL7) that the healthcare industry is widely adopting. Not all Vermont hospitals participate.	Flu surveillance data on Vermont Department of Health webpage

Indicators for analysis	- Emergency Department visit date and hospital name - Patient age, gender, town and state - Chief complaint, diagnosis, disposition

Data Source	*Electronic HIV/AIDS Reporting System (eHARS)*
Sponsors	The data system is maintained by the epidemiologist in the HIV/AIDS/STD/Hepatitis unit of the Infectious Disease Section.
Contacts	Mike Bassett 802-863-7217 Mike.Bassett@vermont.gov
Most current year available	Complete data available 1983 through 2014. The system is updated as data is received.
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
The system is updated as labs and case report forms are received at the Health Department, several times a week. Data is uploaded to CDC at the end of every month.	HIV is a reportable disease, as is AIDS. HIV viral load measurements (including non-detectable results) are reported as are all CD4 counts that are under 200 cells/mm^3. eHARS archives case report forms and lab results.	Any person who is a resident of Vermont, was diagnosed in Vermont, or is receiving care in Vermont for HIV or AIDS. We also receive data about VT residents from other states.	All HIV/AIDS diagnoses among people who were either initially diagnosed in Vermont or are receiving their medical care in Vermont as well as health information regarding all viral loads and CD4 counts under 200.	Lag in reporting when lab results are received without case report forms and therefore cannot be added to the system.	• Integrated Epidemiologic Profiles for HIV/AIDS Prevention and Care Planning • Summary reports • Grant proposals

Indicators for analysis	• Demographic factors (age, sex, race/ethnicity, residence, risk factors for HIV infection) • Diagnostic and treatment info (earliest date, residence, provider, facility, continuation of care)

Data Source	*Infectious Disease Outbreak Database*
Sponsors	Data is maintained and tracked by an epidemiologist in the Infectious Disease Section of the Health Department.
Contacts	Bradley Tompkins 802-863-7240 Bradley.Tompkins@vermont.gov
Most current year available	1999 -2015
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Database is updated monthly.	Designed to capture descriptive information of infectious disease outbreaks that have occurred in Vermont or that involve Vermonters.	Aggregate numbers of VT residents who are ill due to an outbreak.	Provides quick access to historic outbreak data. Allows quick extraction of data elements for grant reporting.	Relies on archaic software. Captures basic information on each outbreak, sometimes lacks in-depth information that is part of more complicated outbreak investigations.	• Epidemiology and Laboratory Capacity reports • Emergency Preparedness grant reports

Indicators for analysis	• Number exposed, ill, sent to doctor/ER, hospitalized, dead • Location of outbreak, setting of outbreak • Causative agent • Mode of transmission • Date outbreak started • Lead investigator

Data Source	National Electronic Disease Surveillance System (NEDSS) aka NEDSS Base System (NBS)
Sponsors	Data is maintained and tracked by an epidemiologist in the Infectious Disease Section.
Contacts	Chelsea Dubie 802-863-7240 Chelsea.Dubie@vermont.gov
Most current year available	January 2004 through the present
Public use data set available	Some aggregated data available to the public here: http://healthvermont.gov/prevent/IDN/IA/atlas.html; Other aggregated data available by request to Chelsea Dubie Available geographies: State, County

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
The system is updated daily as disease reports are received from health care providers and laboratories.	The data are organized by unique occurrences of a reportable disease. Thus individuals could be in the database multiple times due to a diagnosis of different reportable diseases or due to a re-occurrence of the same reportable disease. This system is used by PHNs in District Offices and transmits data electronically to CDC.	Every instance of a reportable disease diagnosed in Vermont. Occurrences in Vermont are represented in this data set (VT residents and out-of-state residents diagnosed in VT). We also receive data on VT residents diagnosed with reportable diseases in other states.	It is a complete surveillance database of all reportable diseases. Allows for analysis of trends over time. Analysis can be performed by individual or by disease occurrence.	Some VT residents who are diagnosed out of state may not be reported to VDH.	CDC's Morbidity and Mortality Weekly Report (MMWR) summarizes national reportable disease data, including VT data.

Indicators for analysis	• Demographic factors (age, sex, race) • Disease-specific data

Data Source	*Refugee Health Data System*
Sponsors	The Vermont Department of Health's Refugee Health Program and the Department of Health and Human Services' Office of Refugee Resettlement.
Contacts	Martha Friedman 802-863-7344 Martha.Friedman@vermont.gov
Most current year available	October 2012 to present.
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Data system is updated as Domestic Health Assessment forms are received from health care providers doing these initial medical exams. Data are reported to the Office of Refugee Resettlement (ORR) every 4 months.	Data elements in VT's report are based on this standard. ORR identifies best practice elements of an initial medical exam for newly arriving refugees, and requires states to ensure the exams occur. These visits typically occur within 90 days of refugees' arrival in the U.S.	All individuals resettled in Vermont as refugees.	Only source of data that provides a state-based assessment of the health of newly arrived refugees. Provides baseline data for certain health indicators (i.e. lead levels)	1. Lag time between exams and receipt of some reports may be considerable. 2. As a relatively new data source, report capabilities are still being developed. 3. No data available on chronic disease indicators (i.e. tobacco use, BMI)	Trimester reports to the Office of Refugee Resettlement Other VDH programs upon request

Indicators for analysis	• Demographic factors (age, sex, country of origin) • Summaries of diseases of public health importance (e.g., tuberculosis infection, lead levels, hepatitis B status)

Data Source	**_Sexually Transmitted Diseases Surveillance Dataset (STDMIS)_**
Sponsors	CDC created the data system that is locally maintained by the HIV/AIDS, STD, and Hepatitis Program Chief.
Contacts	Daniel Daltry 802-863-7305 daniel.daltry@vermont.gov
Most current year available	Annual data available 1996 through the present - approximately 2,000 cases per year.
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Database is updated as labs/case report forms come in, several times a week and then as case investigators interview patients. Data is uploaded to CDC at the start of each week.	Chlamydia, gonorrhea, and syphilis are reportable infections. STDMIS archives case report forms, lab results, risk profile, and treatment information for each reported case.	Any Vermont resident who is diagnosed with a reportable sexually transmitted infection (STI), regardless of state they are tested in.	All STI diagnoses among Vermonters, including treatment information and risk profile of the case and their sexual partners.	Currently the system is not set up to receive electronic reporting.	• Integrated Epidemiologic Profiles for HIV/AIDS Prevention and Care Planning • Summary Reports

Indicators for analysis	• Demographic factors (age, sex, race/ethnicity, residence, sexual orientation) • Diagnostic and treatment info (earliest date, provider, facility, continuation of care) • Information on risk behaviors

Data Source	**_Statewide Incident Reporting Network (SIREN)_**
Sponsors	SIREN is Vermont's pre-hospital patient care reporting system. It is a web-based, NEMSIS (National EMS Information System) gold compliant, vendor hosted solution. The Health Department manages the database and oversees data collection.
Contacts	EMS Data Manager Emma Gause 802-863-7311 siren@vermont.gov
Most current year available	2009 - Present. The Health Department initially contracted with the SIREN vendor in 2009 when three Emergency Medical Services (EMS) agencies began submitting patient care reports. By 2015, 100% of Vermont based ambulance agencies were submitting patient care reports to SIREN.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Patient information is collected real-time as a medical record. Vermont EMS Rules mandate submission of pre-hospital patient data to the state within one business day of the incident occurring for all ambulance/transport responses.	SIREN is a secure, web-based, vendor hosted solution, comprised of real-time patient data entered by EMS providers. The database contains data collection, storage, extraction and analytical capabilities. Patient care reports are comprised of national and state coded and free text data.	Any patient receiving pre-hospital, emergency medical care by a Vermont licensed ambulance agency.	Real-time data; applicable to a variety of public health analyses (motor vehicle crash injury, intentional injury, falls, child passenger safety, naloxone use); possible data linkage capabilities with other State data systems.	Dependent on EMS provider data collection; SIREN reports currently allow more than one way to document EMS interventions and incident information; detailed patient info may be documented in narrative as free text rather than as extractable national and state defined data components; patient narrative data are not routinely incorporated in analysis.	• VDH Naloxone Data Brief • VDH pediatric injury reports • EMS Annual Report (pending) • EMS quarterly newsletter • Media inquiries

Indicators for analysis	• VT EMS quality improvement • Motor vehicle crash related injury • EMS naloxone use • EMS agency utilization • AOT-VDH data collaboration • VDH-Hospital data collaboration (outcomes evaluation)

Data Source	*Substance Abuse Impaired Driving Rehabilitation Program Database*
Sponsors	Impaired Driving Rehabilitation Program (formerly Project CRASH).
Contacts	Jerri Brouillette, LADC ADAP Clinical Service Program Manager/Director of CRASH 802-863-7651 Jerri.Brouillette@vermont.gov
Most current Year available	2015
Public use data set available	Request data from Jerri Brouillette.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Weekly	Data on individuals who enroll in the CRASH program. Data by individual. Includes school enrollment and completion, treatment enrollment and completion, BAC, and type of offense.	Individuals enrolled in the Impaired Driving Rehabilitation Program.	Highly consistent data – one data entry staffer for the past decade. Person-level information, including multiple offenses. Type of offense, school enrollment and completion dates all in one data system.	SQL relational database (many to one relationships that need to be carefully queried). Many laws and regulations that if unknown make the data difficult to interpret. Data follows changes in law, which means some values are different for the same field even though they may signify the same thing.	None.

Indicators for analysis	• Completion Reports • Enrollment rosters • Multiple Offender data

Data Source	**_Substance Abuse Treatment Information System (SATIS)_**
	Description of the data collected is here: http://healthvermont.gov/adap/grantees/documents/SATIS_ProviderDataElements_ICD_10.pdf
Sponsors	Vermont Department of Health's Alcohol and Drug Abuse Programs (ADAP)
Contacts	Anne VanDonsel, 802-652-4142 Anne.VanDonsel@vermont.gov
Most current Year available	Data available – approximately FY2000 through FY2014
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Providers submit data monthly for admissions, services, and discharges provided the previous month.	Three linked tables representing episodes of care. This includes an admission table, service table, and discharge table. _Admission:_ Provider identifier, client identifier, demographic information, date of admission, education, employment, referral source, (primary/secondary/tertiary) substances used, route of administration, frequency of use, age of use, provided service, payment responsibility, income, dependents, social connectedness, pregnant, living arrangement, arrests, SSN (last four digits), diagnosis codes, unique identifiers for linking services and discharge to correct admission record. _Service(s):_ Provider identifier, client identifier, dates of service – units of service varies by level of care. Payment responsibility, unique identifiers for linking services to correct admission record. _Discharge:_ Provider identifier, client identifier, discharge date & reason, education at time of discharge, employment, (primary/secondary/tertiary) substances used, route of administration, frequency of use, social connectedness, living arrangement, arrests, SSN (last four digits), unique identifiers for linking discharge to correct admission record	Client level service data for people served through the ADAP funded preferred provider system. Note: Does not include people receiving substance abuse treatment services outside the ADAP-funded preferred provider system. This excludes individuals receiving treatment for opioid addiction through physicians, hospital based treatment, treatment received at a private practitioner social worker, mental health counselor or substance abuse counselor.	Includes demographic information; collects information that allows an evaluation of change between admission and discharge.	The unique identifier does not identify an individual – person level data cannot be directly linked to other sources of data. Includes only direct treatment (Outpatient, Intensive Outpatient, Residential, Hub/Methadone) services – does not cover the full continuum of care. Units of service provided data is unreliable due to changes in unit measures over time – for instance, reporting changed from 15 minute increments to an encounter. These data are in Microsoft Access.	• ADAP internal reporting • VDH Dashboard • SAMHSA's Treatment Episode Data Set (TEDs)

Indicators for analysis	_Service utilization_ _Trend analysis_ _Outcomes evaluation_

Data Source	***Vermont Cancer Registry***
Sponsors	http://healthvermont.gov/research/cancer_registry/registry.aspx
Contacts	Jennifer Kachajian Jennifer.Kachajian@vermont.gov 802-651-1977
Most current Year available	Complete data available 1994 through 2012 (as of August 2015). Each new data year generally becomes available in June, after the national comparison data have been published. The dataset is population-based and becomes available 30 months after the close of each diagnosis year.
Public use data set available	Data should be requested from the Public Health Analyst of the Vermont Cancer Registry at the Vermont Department of Health. Incidence Maps and Data can be found at: http://healthvermont.gov/prevent/cancer/maps_data.aspx#access

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data are entered on a regular basis, as data are reported and quality assurance is performed.	This is a registry. A case must be reported within 180 days of diagnosis by VT healthcare facility or provider. Other states' cancer registries have 18 months after the end of the diagnosis year to report the occurrence of cancer among Vermont residents that were diagnosed or treated out-of-state.	Any Vermonter with an in situ or malignant cancer diagnosis or benign brain tumor.	All cancer and benign brain tumor diagnoses among Vermonters. Vital status is updated through linkages with Vermont Vital Statistics System and National Death Index. VCR data meet or exceed all national standards for fitness for use.	Lag in reporting by 30 months, no data prior to 1994, and small numbers for some cancers mean some incidence data require suppression.	• Vermont State Cancer Plan and Status Report • Age-Adjusted Incidence and Mortality Tables • County Fact Sheets • Data Briefs • Dynamic Incidence Maps • Radon, Smoking and Lung Cancer Tracker

Indicators for analysis	• Demographic factors (age, sex, race/ethnicity, residence) • Primary payer • Previous cancer diagnosis • Diagnostic info (primary site, laterality, histology, behavior, grade, Diagnostic confirmation, LN ex/Pos, staging) • Treatment info (earliest date and most definitive type of each modality) • Incidence and yearly trends • Mortality

Data Source	*Vermont Immunization Registry (IMR)*
Sponsors	http://healthvermont.gov/hc/IMR/index.aspx Data should be requested from the Immunization Registry Manager at the Health Department.
Contacts	Bridget Ahrens 802-951-4094 Bridget.aherns@vermont.gov
Most current Year available	Data 2000 to current is more consistently complete. Vaccination codes changed in 1996. Immunization data from prior to 1996 and during the coding transition is more likely to be missing.
Public use data set available	Individuals may request their own immunization records, but must provide photo identification.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Since it is a registry, data is updated on an ongoing basis. Data is updated at slightly different time intervals depending on how a site delivers its data. As of October 2015, over one hundred immunization provider sites in Vermont were sending or entering immunizations within 7 days of administration.	Data is collected as a registry from 3 sources: (1) data is entered by providers, (2) data is provided via monthly batch feed into the system, (3) direct transmission of real time data from an electronic medical record. Most Health Insurers and many pharmacies also report data via a monthly import.	All persons born in VT since 1909 have a record in the registry. Any individual that has had a vaccine in a VT hospital or provider practice and, persons with a Vermont address who received an immunization at Dartmouth Hitchcock Medical Center in NH also have Registry records.	Helps providers assess which immunizations have already been received, preventing unnecessary immunizations and saving medical costs. Provides easy access to printable, consolidated immunization records needed for school, work, etc. Allows school nurses to access immunization data directly. Allows doctors to assess their own immunization practices and assess vaccine coverage. Provides state and county level data for planning and evaluation, and for outreach to underserved areas.	Data on vaccinations prior to 2000 may be incomplete. Rutland county still lags with Registry reporting due to technical issues, so the immunization coverage numbers from this part of the state may be an under-estimate.	• NCQA assessments • Healthy Vermonters 2020 • IISAR-Annual Report (CDC.gov) • Immunization Goal Tracker • Summary data available upon request.

Indicators for analysis	• Vaccination type and date of vaccination • Lot numbers

Data Source	**_Vermont Lead Database_**				
Sponsors	The Healthy Homes Lead Poisoning Prevention Program warehouses the database.				
Contacts	Andrea Haugen, Healthy Homes Program Chief 802-863-7388 andrea.haugen@vermont.gov				
Most current Year available	~1993 to present.				
Public use data set available	No.				

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data is added to the database as information is reported by providers and laboratories in Vermont.	Any lab completing a blood lead test is required to report to the system (a 1032 database). Blood leads are sent in many formats by all laboratories and providers that performed a test. All capillary tests that are above the acceptable level, are required by statute to be followed up with a venous blood level test.	Children who have been tested for blood lead in Vermont and residents tested out of state. This includes Vermonters and those from out-of-state who had the blood lead test performed by a Vermont provider or laboratory.	Database includes results from all laboratories and providers that completed a lead test.	Relies on archaic DOS software.	• Lead Legislative Report • EPHT-Childhood lead poisoning

Indicators for analysis	• Blood Lead Levels
	• Child's age at test
	• Confirmation and re-testing rates
	• District office testing vs. Provider testing
	• Town of Residence and/or VDH district.
	• Among Children who have a blood lead level ≥10mg/dL *and* who have had a visit from the case manager:
	    o *Age of property*
	    o *Rental or owned property*

Data Source	**_Vermont Medical Assistance Program (VMAP) Access Database and CAREWare_**
Sponsors	The data system is maintained by the epidemiologist in the HIV/AIDS/STD/Hepatitis unit of the Infectious Disease Section.
Contacts	Erin LaRose Erin.LaRose@vermont.gov 802-863-7244
Most current year available	2000 - Current
Public use data set available	No.

Frequency	Design	Population (units)	Strengths	Limitations	Reporting Groups
Database is updated as new information is reported to the Health Department; quarterly; and semi-annually depending on the source of the information. Data is uploaded to HRSA and annually.	Eligibility, demographic and service provision information.	Vermont residents diagnosed with HIV/AIDS and with an FPL of 500% or less.	All HIV/AIDS service information in Vermont.	Data in CAREWare is not 'real-time'; Provider Data Import is received semi-annually.	• Integrated Epidemiologic Profiles for HIV/AIDS Prevention and Care Planning • Ryan White Services Report (RSR) • Ryan White Data Report (RDR) • Provider Data Import (PDI) • Comprehensive Integrated Plan for HIV Services and Prevention and Statewide Coordinated Statement of Need (SCSN)

Indicators for analysis	• Demographic factors (age, sex, race/ethnicity, residence) for people receiving a care service listed above [strengths] • Medication Adherence info for Treatment Cascade • Service information related outpatient ambulatory, medical nutrition therapy, mental health, medical case management, dental, medication adherence)

Data Source	*Vermont Nurse-Family Partnership Home Visiting Program Database*
Sponsors	*Program funded by HRSA under Maternal, Infant and Early Childhood Home Visiting (MIECHV) program.*
Contacts	Program Coordinator Ann Giombetti 802-865-1336 Ann.Giombetti@vermont.gov Home Visiting Program Data Administrator Morgan Paine Morgan.Paine@vermont.gov Public Health Analyst John Burley 802-863-7235 John.Burley@vermont.gov
Most current Year available	July 2012 to present.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data are added to the database monthly.	Information collected about home visiting services provided by five regional Home Health Agencies using the Nurse-Family Partnership evidence-based model. Includes demographic data on participants, home visits, health screenings and referrals provided, and selective outcome data.	Program serves Vermont-resident, low income, first-time mothers enrolled prior to 28 weeks of pregnancy, and their child/children up to the age of 2 years.	Database designed to meet federal grant reporting requirements, and to produce Vermont statewide home visiting performance measures. Data also used for program management and oversight, and for continuous quality improvement.	Contains only a subset of data collected by the Nurse Family Partnership program. NFP program operating in only 12 of 14 Vermont counties (presently not available in Chittenden or Addison Counties)	• Annual DGIS benchmark report to HRSA • Annual Vermont statewide home visiting performance report required under VT Act 66 (2013)

Indicators for analysis	• Maternal and child demographics • Frequency and duration of home visiting services • Screening data (ASQ-3; ASQ-SE; PHQ-9/EPNDS maternal depression; smoking, alcohol and drug use; intimate partner violence). • Referrals to government and community services; service utilization • Breastfeeding initiation and duration; smoking cessation during pregnancy; child injuries; maternal and child ED utilization; well-child and well-woman preventive health service utilization.

Data Source	***Vermont Parents as Teachers Home Visiting Program Database***
Sponsors	*Program funded by SAMHSA under Linking Actions for Unmet Needs in Children's Health (Project LAUNCH) program.*
Contacts	Program Coordinator Laura Bernard 802-652-2097 Laura.Bernard@vermont.gov	Home Visiting Program Data Administrator Morgan Paine Morgan.Paine@vermont.gov	Public Health Analyst John Burley 802-863-7235 John.Burley@vermont.gov
Most current Year available	October 2013 to present.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data are added to the database +/- continuously in real-time.	Information collected about home visiting services provided by two Burlington Agencies using the Parents as Teachers evidence-based model. Includes demographic data on participants, home visits, health screenings and referrals provided, and selective outcome data.	Program serves low income, families resident in Chittenden County, Vermont, with children up to the age of 5-6 years.	Database designed to meet model developers' annual fidelity reporting requirements, and to produce Vermont statewide home visiting performance measures. Data also used for program management and oversight, and for continuous quality improvement.	PAT pilot program currently operating only in Chittenden County. Limited data set, small numbers.	Annual fidelity reports to PAT Annual Vermont statewide home visiting performance report required under VT Act 66 (2013)

Indicators for analysis	• Maternal and child demographics • Frequency and duration of home visiting services • Screening data (ASQ-3; ASQ-SE; vision, hearing and child physical health and development) • Family Protective Factors survey; family satisfaction survey • Referrals to government and community services; service utilization • Breastfeeding initiation and duration; immunization

Data Source	*Vermont Prescription Monitoring System (VPMS)*
Sponsors	*This is a state funded data system. Data is warehoused by an external contractor and locally managed by the Health Department VPMS analyst.*
Contacts	David Horton Health Department VPMS Analyst 802-863-6354 David.Horton@vermont.gov
Most current Year available	2010- to present
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data enters the warehouse database as it is collected from pharmacies at least once every seven days.	Data is entered directly by pharmacies for all Schedule II-IV controlled substances dispensed from Vermont-licensed pharmacies. Data is then processed by a contractor into flat files for use by the Health Department. Live data is accessible to health care providers who have registered with VPMS.	All prescriptions for controlled substances (Schedule II-IV) dispensed by Vermont licensed pharmacies.	Universal database of controlled substances dispensed in Vermont. Variables on prescription, patient, provider and dispenser. Data is up-to-date and entered into the system as information becomes available.	Raw data only accessible by two analysts. Legal restrictions on what can be released. This registry has many users entering data with varying levels of data training.	VPMS Annual Reports

Indicators for analysis	• *DEA numbers of prescribers and pharmacies* • *Substance prescribed and dosage* • *Name and date of birth of recipients*

Data Source	*Vital Statistics*
Sponsors	http://healthvermont.gov/research/records/vital_records.aspx Data collection and management is overseen by the Health Department Vital Records Office.
Contacts	Cindy Hooley: 802-651-1636; cynthia.hooley@vermont.gov
Most current Year available	Final data available for 2011, preliminary data for 2012 and 2013.
Public use data set available	Aggregate data and reports available at: http://healthvermont.gov/pubs/Publications.aspx#vital Submit Data request to Cindy Hooley. Available geographies: State, County, Health District, and Hospital Service Area

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Ongoing The Vermont vital statistics system monitors: • births • deaths • marriages and civil unions • divorces and dissolutions • fetal deaths • abortions	**Births:** The physician, midwife, or other birth attendant is required to complete a birth certificate within 5 days of the birth. For hospital births, the medical records staff enters the birth information into the Electronic Birth Registration System (EBRS) and submits to the Health Department. The legal birth certificate is printed at the hospital and sent to the town of birth for registration. **Deaths:** A physician is responsible for completing the death certificate, though the job is often delegated to the funeral director (with the exception of the cause of death). Information needed to complete the death certificate is obtained from the family of the deceased. Once a death record is completed in the Electronic Death Registration System (EDRS), it is registered and the death certificate is available to the town clerks for filing. **Fetal deaths and abortions:** Reports of fetal death and induced termination of pregnancy (abortion) are sent directly to the Department of Health by the physician, hospital, or clinic that performs the procedure. Reports are for statistical purposes only, not public records, and are destroyed after five years. All vital records received are data entered and stored electronically, and data from births and deaths which occur in Vermont is transmitted to the National Center for Health Statistics to become part of a national database.	VT occurrences. Includes all resident births and deaths which occur in Vermont. Transcripts of resident birth and deaths which occur in other states are mailed to Vital Records. Fetal deaths and abortions are Vermont occurrences, but does not include events that occur to Vermont residents while outside Vermont (unlike birth and deaths, which are reported for VT residents by other states).	Births and deaths are a census of all births and deaths for Vermonters. There is other information that is collected as part of the birth and death certificate that we can use for analyses.	Finalized analytics files are often a year or more behind real-time. Events that occur (births/deaths) to Vermonters while outside Vermont are received by Vital Records for statewide reporting, but cannot be released at a record level due to state law and national agreement.	• Vital Statistics Annual Bulletins • Healthy Vermonters 2020

Indicators for analysis	Commonly used information from birth certificate—other information also available: • Birth weight • Smoking during pregnancy Race/ethnicity • Gestational age • Use of prenatal care • Mother's Weight and Height	Commonly used information from the death certificate—other information also available: • Underlying cause of death

Claims and Discharge Data:

Data Source	***Blueprint Vermont Healthcare Claims Uniform Reporting and Evaluation System Data Set***
Sponsors	Data maintained by external vendor (OnPoint Health Data, ME). An analytics group at Onpoint is tasked with doing a variety of analyses for the Blueprint staff using this data set.
Contacts	Blueprint Data Analyst & Information Chief Tim Tremblay Timothy.tremblay@vermont.gov 802-654-8923
Most current Year available	2007 through 2014.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Data in the VHCURES data set is updated as claims are paid and processed. The extract for Blueprint analytics is updated as appropriate (the plan is every 6 months). Eventually, real-time access through a virtual "work bench" with Onpoint has been discussed to improve access to the data.	Follows same data collection process as the broader VHCURES data set. The Blueprint version of VHCURES has additional value added including a flag for Blueprint practices. There is also additional information about attribution (to either a participating or non-participating Blueprint practice).	Paid claims of Vermont residents. (Same as VHCURES with additional value added).	It is useful for measuring expenditures, and person level information among Vermonters utilizing the health care system.	Since this only includes paid claims, we do not have information on what was originally included on the submitted claims or how the claim was adjusted. OnPoint does not share its data cleaning technique, so when numbers do not match broader VHCURES data the reasons cannot be explained.	Data used for evaluation in the 2012 Annual Report

Indicators for analysis	- Information related to monthly membership - Practice level attribution - Expenditures - Service utilization - Chronic Disease information - CRG status

Data Source	***Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES)***
Sponsors	Green Mountain Care Board /Department of Financial Regulation http://gmcboard.vermont.gov/vhcures
Contacts	Susan Barrett Susan.Barrett@vermont.gov 802-828-2919
Most current Year available	Data set starts with claims incurred since Jan 1, 2007.
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
The data set is continually changing and adjusting. New claims are fed in on a regular basis, which data users should be cautious of when performing analyses. Typically adjustments and payments are completed within 9 months of the date of service.	Insurers (and Medicaid) covering more than 200 Vermont lives are required to report paid claims data to this database. Blueprint has a subset of this data set that has additional data points (*see VHCURES_Blueprint*)	Individuals with paid insurance claims.	We are able to see the amount paid for services. Information is at an individual level and we can see most encounters with the health care system (primary care, hospital, ED, pharmacy), as long as a claim is filed.	For some patients (self-pay) we cannot fully see their utilization of the health care system, as we can only see paid insurance claims. We cannot speak to individuals that are not utilizing the health care system, including those who do and do not have insurance.	• APCER Report • Vermont Health Service Area (HSA) Profile Reports • Blueprint for Health Annual Reports • 2007–2011 Vermont Health Care Cost and Utilization Report by the Health Care Cost Institute • Tracking Spending Among Commercially Insured Beneficiaries Using a Distributed Data Model • The Dartmouth Atlas of Children's Healthcare in New England • Vermont Health Systems Payment Variation Report • PCSA Spatial Analysis • Tri-State Variation in Health Services Utilization & Expenditures in Northern New England • GMCB Analytic Plan • Presentation: Analysis in Support of Health Care Reform • Health Care Reform Analysis Summary • Presentation: Vermont Health Spending Growth Drivers commercial and Medicaid, 2008-2012

Indicators for analysis	*We are in the process of learning more about this data set and the various claims related indicators that we can report on.*

Data Source	**_Vermont Uniform Hospital Discharge Data Set (VUHDDS)_**
Sponsors	The Health Department has an MOU with GMCB to manage and report on the hospital data Data should be requested through VUHDDS Manager at the Health Department. http://healthvermont.gov/research/hospital-utilization/
Contacts	Barbara Carroll (802) 865-7704 Barbara.Carroll@vermont.gov
Most current Year available	Analysts can access complete data for 2002 through 2013. Data files from 1980 through 2001 are not yet available to the Health Department users in SPSS or SAS formats, but may be upon request and approval. The earlier data years do not include as many variables or types of records.
Public use data set available	http://healthvermont.gov/research/hospital-utilization/RECENT_PU_FILES.aspx; http://healthvermont.gov/research/hospital-utilization/ARCHIVED_HOSP_REPORTS.aspx Available geographies: State, County, Health District, Hospital Service Area

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Annually updated (however, sometimes there are delays getting info on Vermont residents from hospitals in bordering states).	Data include all discharges submitted by Vermont hospitals to VAHHS-NSO, which then delivers the data to the Health Department as contracted with GMCB. Data for Vermont residents discharged from hospitals in NY, NH, and MA are received from those states per MOUs. Discharges from Mental Health hospitals and inpatient treatment facilities are NOT included in the hospital discharge data set. In addition to information on up to 20 diagnosis codes associated with each visit, hospitals may report primary ecode listed at discharge, patient age, sex, geographic location of origin, procedure codes, revenue codes, and total charges associated with a visit.	The unit is a hospital inpatient, outpatient, or ED discharge/visit. For most analyses we limit this to VT residents. We can also choose to limit this to VT hospitals.	Census of all Hospital visits including inpatient, outpatient and Emergency Department. Based on ICD-9-CM and ecodes so we can look at charges by diagnosis or procedure.	We cannot examine re-admission as there is no person-level indicator. NH data are currently only available as incomplete sets for 2010 and 2011: this makes trend analysis difficult due to a large number of missing records. The White River Junction VA Medical Center has not submitted data since 2006.	• Blueprint Big Book • Annual Hospital Reports

Indicators for analysis	• Up to 20 diagnosis codes mentioned at discharge (ICD-9-CM)— there is a principal diagnosis for all inpatient/outpatient/ED discharges. • CPT/procedure codes—All discharges MAY have up to 20 ICD-9-CM procedure codes. Some discharges have no procedure codes. • First ecode listed • Charges (distinguished from paid claims) • Primary Payer • Age/Sex/Hospital Service Area

Regulatory and Licensing Data:

Data Source	***Asbestos and Lead Regulatory Program – Auditing Compliance Tool (CLASSACT)***
Sponsors	Asbestos and Lead Regulatory Program Staff – Vernon Nelson or Patrick Brown
Contacts	Vernon Nelson: Vernon.Nelson@vermont.gov; 802-865-7784 Patrick Brown Patrick.Brown@vermont.gov 802-863-7236
Most current Year available	Data available – approximately 2001 through present
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database periodically with data taken from Compliance Inspections of licensed contractor entities, training providers and AHERA schools.	ClassACT is a Freeware product. The product was developed under USEPA funds for states and tribes to implement their lead programs. The EPA does not make any warranty expressed or implied of the enclosed products. Product support will be handled through the ClassACT Project Officer. This product was developed with assistance from the members of the Consortium of North East States and Tribes (CONEST) and the Mid-Atlantic Regional Environmental Consortium (MAREC).	Vermont specific schools (public and Non-Profit) and licensed training providers.	Generate reports for overall report totals. The ability to print as .RTF and .PDF files of compliance inspection report by Inspector. Add new LEAs for AHERA Compliance Inspections.	ClassACT product is limited; not user-friendly for reporting or editing existing reports.	EPA - compliance reports

Indicators for analysis	• *Compliance history for both training providers and AHERA* • *Address specific abatement history*

Data Source	**_Asbestos and Lead Regulatory Program Licensing Database (ALRP)_**
Sponsors	Asbestos and Lead Regulatory Program Staff – Vernon Nelson
Contacts	Vernon Nelson: Vernon.Nelson@vermont.gov; 802-865-7784
Most current Year available	Data available – approximately 1996 through present
Public use data set available	Only publicly available data is licensed contractor list. Lead: http://healthvermont.gov/enviro/lead/documents/lead_consult_contractor_list.pdf Asbestos: http://healthvermont.gov/enviro/asbestos/documents/asbestos_consult_contractor_list.pdf

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database daily with data for licensed contractors entities and individuals.	Access 2003 database built by EPA in 2000, upgraded to Access 2003 (called CERT 2000) used by Vermont to keep track of all licensed individuals and companies wanting to abate asbestos and/or lead from houses, public buildings, commercial building and superstructures like bridges, water tanks, etc. Have the ability to print wallet cards and license certificates for individual contractors; and print license certificates for entity contractors.	Individuals and Entity contractor's data for license holders of the Asbestos and Lead Regulatory Program in VT. Contractors come from mainly New England states but we've had companies from California, Texas, Ohio, New York to name a few.	Includes citations to individuals and entities that have received unannounced inspections of permitted projects; updated in real-time. Generate quarterly reports for Asbestos and Lead licensed contractors.	This data is Access 2003 format and requires programming language knowledge to repair database. Would like to upgrade database to Access 2010 to keep current. Access is limited; not user-friendly for reporting or changing existing reports.	• VDH Dashboard • VDH Asbestos and Lead Regulatory Program Website • EPA required Asbestos & Lead reports

Indicators for analysis	• *Contractor licensing history* • *Expiration reports generated*

Data Source	**_Asbestos Regulatory Program – Permitting Database (ASB PERMIT)_**
Sponsors	Asbestos and Lead Regulatory Program Staff – Vernon Nelson and Christopher Kinnick
Contacts	Vernon Nelson: Christopher Kinnick Vernon.Nelson@vermont.gov; 802-865-7784 Christopher.Kinnick@vermont.gov 802-863-7382
Most current Year available	Data available – approximately 1985 through present
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database daily with data for licensed contractor entities wanting to abate asbestos from a building.	Microsoft Access was used to design a database to document state specific requirements regarding data reporting. Program staff had IT support as well in developing a working system. Over the years, new data fields were added to capture data being requested by State and Federal Stakeholders. Database was used to keep track of all licensed companies wanting to abate asbestos from any type of structure that contained Asbestos. Has the ability to print permit certificates related to project and entity contractor.	Entity contractors provide regulatory data in order to procure a permit to abate asbestos from structures within Vermont.	The database is flexible. Its data field, tables and forms can be updated at any time. Generate reports for open permits, field lists to prepare for unannounced inspections, waste management reports.	This data is Access 2003 format and requires programming language knowledge to repair database. Access is limited; not user-friendly for reporting or changing existing reports.	• EPA required Asbestos & Lead reports

Indicators for analysis	• _Citation history_ • _Address specific abatement history_

Data Source	*Essential Maintenance Practices In-House Registry (EMP Registry)*
Sponsors	Asbestos and Lead Regulatory Program Staff – Patrick Brown and Edmond Daudelin
Contacts	Patrick Brown Edmond Daudelin Patrick.Brown@vermont.gov 802-863-7236 Edmond.Daudelin@vermont.gov 802-651-1864
Most current Year available	Data available – approximately 2006 through present
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database daily with data received from property owners/managers or child care facility owners/operators.	Microsoft Access was used to design a database to document state specific requirements regarding data reporting. Program staff had IT support as well in developing a working system. Over the years, new data fields were added to capture data being requested by State and Federal Stakeholders. Database was used to keep track of all compliance statements or affidavits for rental and child care properties and EMP trainees, trainers and locations trained. Has the ability to print trainee certificates and related reports for state and federal stakeholders.	Contains properties, property owners, property managers, child care facility owners/operators, EMP trainees and their certificates, compliance statements filed, 30-day reminders before and after expiration date.	At the time of its creation, it was the only storage of rental and child care property compliance statements needing to be filed every 365-days based on state statute.	This data is Access 2003 format and requires programming language knowledge to repair database. Access is limited; not user-friendly for reporting or changing existing reports.	• EPA required Asbestos & Lead reports • Vermont Housing & Conservation Board • Vermont Healthy Homes

Indicators for analysis	• *Citation history* • *Address specific abatement history*

Selection of Health Department Data Source descriptions- January 2016 (v5_1.15.16)   *43*

Data Source	*Essential Maintenance Practices Online Registry (EMP REGISTRY)*
Sponsors	Asbestos and Lead Regulatory Program Staff – Patrick Brown and Edmond Daudelin
Contacts	Patrick Brown Edmond Daudelin Patrick.Brown@vermont.gov 802-863-7236 Edmond.Daudelin@vermont.gov 802-651-1864
Most current Year available	Data available – approximately 2013 through present
Public use data set available	Only publicly available data is property search on compliance status: https://secure.vermont.gov/VDH/emp/CheckEMPStatus.php

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Property owners, property managers or child care facility owners/operators file a compliance statement every 365 days or when a change of tenant at their property(ies) occur.	Vermont Information Consortium (VIC) developed a registry to contain all properties, property owners, property managers, child care facility owners/operators, EMP trainees and their certificates, compliance statements filed with EMP inspections and other necessary data fields. Program staff assisted VIC in the developing this registry and processes. Many reporting tools were added for easy reporting out.	Contains properties, property owners, property managers, child care facility owners/operators, EMP trainees and their certificates, compliance statements filed, 30-day reminders before and after expiration date.	Self-reporting. Online lookup of any property within the registry for current compliance statement.	Registry back-end is not accessible by program staff. Registry reports are few and not programmable. Each report must be built by VIC.	• VDH Asbestos and Lead Regulatory Program Website • VT Office of the Attorney General – Lead in Housing

Indicators for analysis	• *Citation history* • *Address specific abatement history*

Data Source	**Food and Lodging Program Licensing and Inspection Database (FANDL)**
Sponsors	Food & Lodging Program
Contacts	Elisabeth Wirsing, Food and Lodging Chief 802-951-0109 elisabeth.wirsing@vermont.gov
Most current Year available	Data available – approximately 1990 through present
Public use data set available	Currently available information can be found at: http://healthvermont.gov/apps/restaurant_scores/RestaurantScores.aspx

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database daily with data for licensed establishments providing food or lodging to the public.	Legacy S1032 database designed at VDH*. Captures licensing data and date of inspection for establishments. Generates reports for Public Health Inspectors to plan work schedule of unannounced inspections. Several linked tables with data attributes. Main tables of data include: *ESTAB MASTER:* Demographic information for establishment and licensee, status, expiration dates, contact information. *INSPECT:* Record for each date of inspection and inspection violations for food service establishments (44-item inspections). *SPECIAL:* Record for each date of inspection by a Public Health Inspector for other types of establishments. *Scheduled for replacement in early 2016 with USAFoodSafety software.	Physical establishment centered data for license holders of the Food & Lodging Program in VT.	Includes demographic information; updated in real-time; established report capability for program evaluation.	This data is in Legacy S1032 format and requires programming language to export for analysis. Does not capture specific inspection violation data for all program areas (lodging, manufactured food, complaint and special investigation data). Access is limited; not user-friends for access in the field by Public Health Inspectors.	VDH Dashboard

Indicators for analysis	• *Establishment licensing history* • *Town level data* • *Inspection intervals* • *Food Service Establishment inspection trends (44-item inspection form components described here:* *http://healthvermont.gov/apps/restaurant_scores/RestaurantScoringProcess.aspx)*

Data Source	*Lead Regulatory Program – Permitting Database (Pb PERMIT)*
Sponsors	Asbestos and Lead Regulatory Program Staff – Vernon Nelson, Patrick Brown and Christopher Kinnick
Contacts	Vernon Nelson: Patrick Brown Vernon.Nelson@vermont.gov; 802-865-7784 Patrick.Brown@vermont.gov 802-863-7236
Most current Year available	Data available – approximately 2005 through present
Public use data set available	No.

Frequency	Design	Population (Units)	Strengths	Limitations	Reporting Groups
Program staff update database daily with data for licensed contractor entities wanting to abate Lead from a building.	Microsoft Access was used to design a database to document state specific requirements regarding data reporting. Program staff had IT support as well in developing a working system. Over the years, new data fields were added to capture data being requested by State and Federal Stakeholders. Has the ability to print permit certificates related to project and entity contractor.	Entity contractors provide regulatory data in order to procure a permit to abate Lead from structures within Vermont.	The database is flexible. Its data field, tables and forms can be updated at any time. Generate reports for open permits, field lists to prepare for unannounced inspections, waste management reports.	This data is Access 2003 format and requires programming language knowledge to repair database. Access is limited; not user-friendly for reporting or changing existing reports.	• EPA required Asbestos & Lead reports

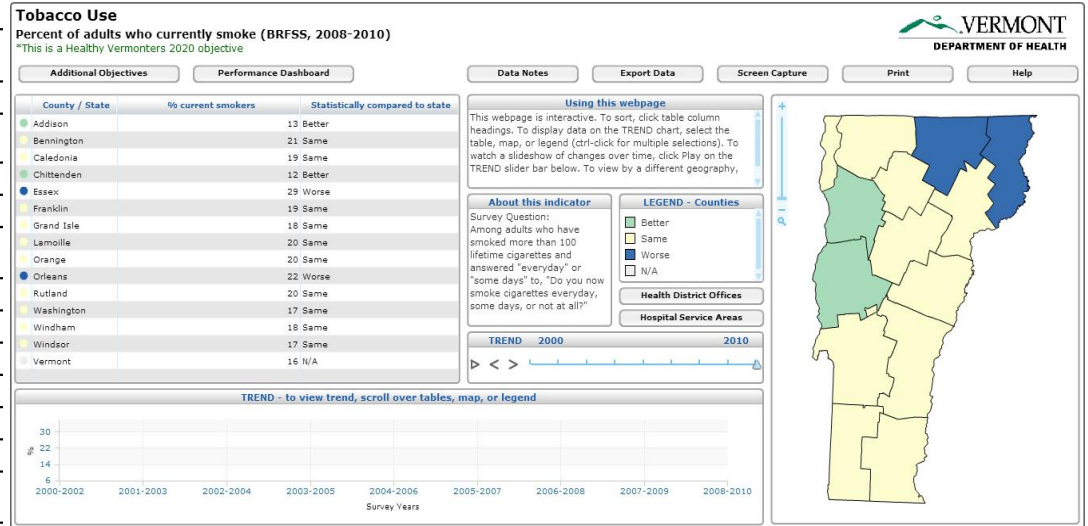| Indicators for analysis	• *Permit projects history* • *Address specific abatement history*

Data Resources:

Healthy Vermonters 2020 Toolkit (includes the 'Performance Dashboard' and 'Maps & Trends')	
Controller	The Health Department (Planning and Healthcare Quality unit)
Access	http://healthvermont.gov/hv2020/index.aspx
Contacts	Heidi Gortakowski Mallory Staskus Heidi.Gortakowski@vermont.gov; 802-951-0142 Mallory.staskus@vermont.gov; 802-651-1516
Years of Data Included	The performance dashboard includes the most recent population health data and information related to program performance and updated on a quarterly basis. The 'Maps & Trends' pages currently show the baseline data of the Healthy Vermonter goals, and trend data for those years preceding baseline.

Data tool updates	Reporting Structure	Population restrictions	Strengths	Limitations
The performance dashboard is updated on a quarterly basis with performance improvement measures. The surveillance measures of the dashboard are updated as new data becomes available. The plan for updating the Maps & Trends data set is still being developed, but is expected to be updated annually.	The Dashboard reports are structured in a table format with color coding, where green signifies improvement from the previous period, yellow signifies no change from the previous period, and red signifies things are moving in the wrong direction from the previous period. Maps, tables, and trend pages show state level and regional level data as well as some trend data. You can view a map for each year of data and a trend graph that shows the state trend and the trend in a selected region. Map, table, and trend graphs all reflect the same data.	Surveillance measures are calculated similarly to the corresponding Healthy People measures. This means numbers are age-adjusted and could slightly differ from crude calculations. More information is available in the *Data Notes* section of the Maps and Trends pages and in the *Turning the Curve* pages of the dashboard.	This allows public access to performance improvement data and to the Health Department's Healthy Vermonter Goals. These pages allow for transparency of Health Department goals and activities.	At this time data is presented by measure, and all regional subgroup information is presented together on one page. It is not possible to see all of the measures for a given region in one location.

Data Sources Referenced	- BRFSS - YRBS - Census data - Physician's Survey - Vital Statistics - Prams - ACBS - VUHDDS - WIC data - ATS - NSDUH - School Nurses' Report

Screen Shot examples

Healthy Vermonters Toolkit		
Statewide Population Indicators	**Maps & Trends**	**Performance Dashboard**

HV2020 Goal: *A Healthy Lifetime* 📄

Family Planning	County District HSA	Dashboard
Maternal & Infant Health	County District HSA	Dashboard
Early Childhood Screening	County District HSA	Dashboard
School-age Health	County District HSA	Dashboard
Older Adults	County District HSA	Dashboard

HV2020 Goal: *Providing for Better Health* 📄

Access to Health Services	County District HSA	Dashboard
Immunization & Infectious Disease	County District HSA	Dashboard
Oral Health	County District HSA	Dashboard
Mental Health	County District HSA	Dashboard

HV2020 Goal: *Behaviors, Environment & Health* 📄

Alcohol & Other Drug Use	County District HSA	Dashboard
Tobacco Use	County District HSA	Dashboard
Nutrition & Weight	County District HSA	Dashboard
Physical Activity	County District HSA	Dashboard
Injuries	County District HSA	Dashboard
Environmental Health	County District HSA	Dashboard

HV2020 Goal: *Diseases & Health Conditions* 📄

Heart Disease & Stroke	County District HSA	Dashboard
Cancer	County District HSA	Dashboard
Diabetes	County District HSA	Dashboard
Respiratory Disease	County District HSA	Dashboard
Arthritis & Osteoporosis	County District HSA	Dashboard
HIV, AIDS & STDs	County District HSA	Dashboard

HV2020 Goal: *Public Health Preparedness* 📄

Public Health Preparedness	County District HSA	Dashboard

Tobacco Use
Percent of adults who currently smoke (BRFSS, 2008-2010)
*This is a Healthy Vermonters 2020 objective

VERMONT DEPARTMENT OF HEALTH

Additional Objectives	Performance Dashboard		Data Notes	Export Data	Screen Capture	Print	Help

County / State	% current smokers	Statistically compared to state
Addison	13	Better
Bennington	21	Same
Caledonia	19	Same
Chittenden	12	Better
Essex	29	Worse
Franklin	19	Same
Grand Isle	18	Same
Lamoille	20	Same
Orange	20	Same
Orleans	22	Worse
Rutland	20	Same
Washington	17	Same
Windham	18	Same
Windsor	17	Same
Vermont	16	N/A

Using this webpage
This webpage is interactive. To sort, click table column headings. To display data on the TREND chart, select the table, map, or legend (ctrl-click for multiple selections). To watch a slideshow of changes over time, click Play on the TREND slider bar below. To view by a different geography,

About this indicator
Survey Question:
Among adults who have smoked more than 100 lifetime cigarettes and answered "everyday" or "some days" to, "Do you now smoke cigarettes everyday, some days, or not at all?"

LEGEND – Counties
☐ Better
☐ Same
☐ Worse
☐ N/A

Health District Offices
Hospital Service Areas

TREND   2000 — 2010

TREND – to view trend, scroll over tables, map, or legend

Survey Years: 2000-2002, 2001-2003, 2002-2004, 2003-2005, 2004-2006, 2005-2007, 2006-2008, 2007-2009, 2008-2010

Vermont Environmental Public Health Tracking Program *(EPHT)*

Controller	The Health Department, Environmental Health
Access	http://healthvermont.gov/tracking/index.aspx
Contacts	David Grass David.Grass@vermont.gov 802-951-4064
Years of Data Included	The Tracking portal includes the most recent publicly available data for each indicator; years of data included vary by indicator but are generally available for the period 2000-2010 with 2011 and 2012 data available for several datasets.

Data Tool updates	Reporting Structure	Population restrictions	Strengths	Limitations
The Tracking portal is updated two to three times per year depending on availability of new data and software tools.	Tables, charts, and maps are presented for various environmental exposures (e.g. air, drinking water) and for health outcomes that may be related to environmental exposures (e.g. cancer, childhood blood lead levels). There are a variety of indicators, some focusing on trends and some focusing on within-state geographic comparison (with error bars); additional stratification (age, sex, etc.) is available where allowed by data stewards. Tracking participates in two CDC data calls per year submitting Vermont data not otherwise available to the federal government (e.g. birth defects, childhood lead poisoning) for display on the National portal as well as on the Vermont portal.	Nationally consistent measures are calculated per CDC definition using specified population denominators. Some indicators overlap with HV2020, but case definitions and population restrictions vary meaning EPHT crude and age-adjusted rates may differ slightly from HV2020 rates.	Twenty three states plus New York City provide standardized data to the National Tracking network allowing comparison to Vermont data. Vermont-specific measures include Standardized Incidence Ratios for specific cancers, the Blue Green Algae Tracker and the Tick Tracker.	100% CDC grant funded. EPHT is a relatively new program and has had limited opportunity to utilize Tracking data for linkage studies due to initial focus on building the portal infrastructure.

Data Sources Referenced	- BRFSS - Vermont Cancer Registry - VUHDDS - U.S. Census - Vital Statistics
Index of Health and Environmental Indicators	*Health Indicators* - Asthma - Birth Defects - Cancer - Carbon Monoxide - Heart Attack - Childhood Lead Poisoning - Reproductive Health *Environmental Indicators* - Air Quality - Climate Change - Drinking Water

Asthma

Asthma Hospitalization - Male and Female: Annual Number and Rates per 10,000 Population

Year: 2007

| Data Notes | Screen Capture | Print |

County / State	Number	Crude Rate	Age Adjusted Rate	95% Confidence Interval (for the Age Adjusted Rate)
ADDISON	22	6.0	6.2	(3.8 - 9.7)
BENNINGTON	33	8.9	9.1	(6.1 - 13.2)
CALEDONIA	15	4.8	5.3	(2.9 - 9.2)
CHITTENDEN	65	4.2	4.5	(3.5 - 5.9)
ESSEX	*	*	*	*
FRANKLIN	26	5.5	5.6	(3.7 - 8.5)
GRAND ISLE	*	*	*	*
LAMOILLE	8	3.4	3.2	(1.3 - 6.8)
ORANGE	12	4.1	3.5	(1.8 - 6.6)
ORLEANS	14	5.1	5.0	(2.7 - 8.9)
RUTLAND	92	14.7	13.9	(11.1 - 17.3)
WASHINGTON	20	3.4	3.3	(2.0 - 5.4)
WINDHAM	32	7.2	7.7	(5.2 - 11.3)
WINDSOR	52	9.1	9.7	(7.1 - 13.0)
VERMONT	398	6.4	6.5	(5.9 - 7.2)

Vermont Age Adjusted Rates by County
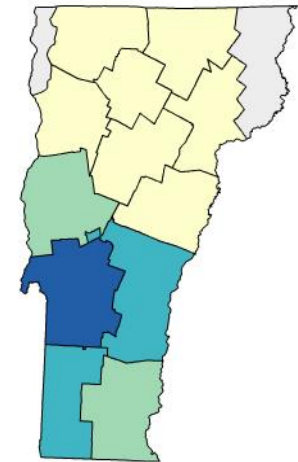
*Numbers and rates based upon fewer than six cases are not displayed; when only one county has small numbers, a second county is not shown, see data notes.

Vermont Counties with State Rate Comparison Line and 95% Confidence Interval
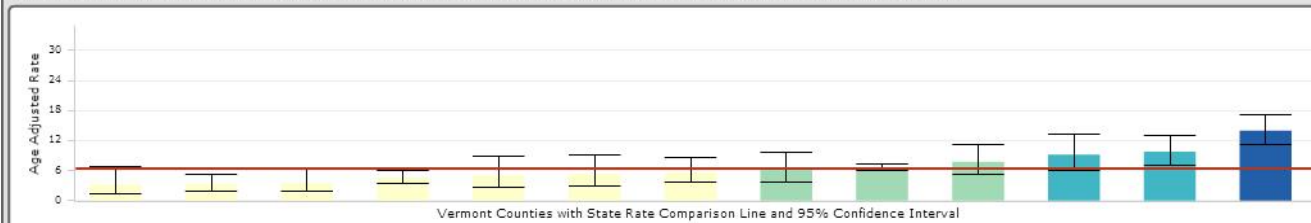
Counties
- 3.2 - 5.9
- 6.0 - 8.6
- 8.7 - 11.2
- 11.3 - 13.9
- *

Screen Shot Examples

Appendix:

Summary of Available Public Health Data Sets		
Data Source	URL to access data set (if none listed, contact the analyst for access to datasets)	Analyst Contact Information
Adult Tobacco Survey (ATS)		Erin.Singer@vermont.gov
Asthma Call Back Survey (ACBS)	http://www.cdc.gov/brfss/acbs/index.htm	maria.roemhildt@vermont.gov
Behavioral Risk Factor Surveillance System (BRFSS)	http://www.cdc.gov/brfss/brfssprevalence/index.html	jessie.hammond@vermont.gov
Environmental Public Health Tracking	https://apps.health.vermont.gov/gis/ias/querytool/	AHS.VDHVTEPHT@vermont.gov
Health Care Provider Census		Moshe.braner@vermont.gov
Pregnancy Risk Assessment Monitoring System (PRAMS)	http://www.cdc.gov/prams/researchers.htm	john.davy@vermont.gov
Substance Abuse Impaired Driving Rehabilitation Program Database		Jerri.Brouillette@vermont.gov
Vermont Cancer Registry	http://healthvermont.gov/prevent/cancer/maps_data.aspx#access	Jennifer.Kachajian@vermont.gov
Vermont Uniform Hospital Discharge Data Set (VUHDDS)	http://healthvermont.gov/research/hospital-utilization/RECENT_PU_FILES.aspx http://healthvermont.gov/research/hospital-utilization/ARCHIVED_HOSP_REPORTS.aspx	Barbara.Carroll@vermont.gov
Youth Risk Behavior Survey (YRBS)	http://www.cdc.gov/healthyyouth/data/yrbs/data.htm	kristen.murray@vermont.gov